Powered by **Innovation**

DOOSAN

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Construction Equipment

DX1000LC-7

Engine Power	470kW @2,100rpm (ISO 14396, Gross)
Operational Weight	97,000 ~ 99,500 kg
Bucket Capacity (SAE/PCSA)	5.4 ~ 6.8 m^3

Photos may include optional equipment

DO BIG JOBS BETTER AND STRONGER WITH DX1000LC-7

HIGH PRODUCTIVITY AND LOW COST OF OWNERSHIP

Delivers higher productivity and reduced fuel consumption in an efficient and comfortable work environment.

RELIABILITY

Designed for the toughest applications, for the most abrasive materials.

SAFETY

Your safety is our priority: 360° camera system, large side mirrors, Powerful LED work lights, anti-slip steps and platforms, guard rails on upper structure.

VERSATILITY

2 front combinations possible to match various conditions. Mass excavation front with large bucket size or heavy-duty fronts when more reach is needed.

SWING BEARINGS

Unique design of crossed bearings, for better stress distribution, and increased lifetime.

UNDERCARRIAGE DURABILITY

Heavy-duty undercarriage, with large rollers and sprocket, enhanced frame for the toughest applications.

EASY MAINTENANCE

Automatic greasing system as an option, all filters easily accessible, compressor with air gun as option, everything designed for easy maintenance.

ADVANCED FILTRATION

Highest efficiency filters & cleaners remove water, dust & particles to protect your investment optimally.

COMFORT

One of the most spacious cabs in the market, with low noise & vibration levels and excellent all-round visibility. Fully adjustable heated air-suspension seat, air conditioning with climate control as standard.

OPERATE AT EASE

All important information is at your fingertips with the new easy-to-use 8" touch screen. Ex clusive jog shuttle switch, 4 work& 4 power modes, proportional control.

ENGINE

Exceptionally powerful – with high torque at low revs – the Perkins 2806D (T_3), 2806J (T_4F/StageV) engine combines reliability and low environmental impact. This T_3, Stage V compliant 6 cylinder engine delivers each 470 kW @ 2,100rpm (T_3), 469 kW @ 2,000rpm (T_4F/StageV).

EXCELLENT FUEL EFFICIENCY

The Smart Power Control (SPC) system increases fuel efficiency by adjusting the power to meet the application's needs. The system delivers the exact amount of oil needed to avoid any loss of energy.

Photos may include optional equipment

TECHNICAL SPECIFICATIONS

ENGINE

Model

Perkins 2806DTier3

Type

Turbocharged after WATER-COOLED,
MEUI (Mechanically Actuated Electronically Controlled Unit Injector)

Number of cylinders

6

RATED HORSE POWER

470 kW (639.2 PS) @ 2,100 rpm (ISO 14396, Gross)

Max torque

282.4 kgf.m @ 1,400 rpm

Piston displacement

18.1 l

Bore & stroke

∅ 145 mm x 183 mm

STARTING MOTOR

24 V x 9.0 kW

batteries

24 V (12 V x 2 / 200 AH)

Air cleaner

Double element with precleaner

HYDRAULIC SYSTEM

The heart of the system is the EPOS™ (Electronic Power Optimizing System). It allows the efficiency of the system to be optimized for all working conditions and minimizes fuel consumption. The new EPOS™ is connected to the engine electronic control via a data transfer link to harmonize the operation of the engine and hydraulics.

- The hydraulic system enables independent or combined operations.
- Two travel speeds offer either increased torque or high speed tracking.
- Cross-sensing pump system for fuel savings.
- Auto deceleration system.
- Two operating modes, two power modes.
- Button control of flow in auxiliary equipment circuits.
- Computer-aided pump power control.

Main pumps

Single, Axial piston
max flow : 3 x 523 ℓ/min @ 100 bar, 1,800 rpm
Displacement : 280 X 3 cc/rev

Pilot pump

Gear pump - max flow : 60l/min
Pilot pump : 32 cc/rev

Main relief Pressure

Main Relief Valve Pressure : 360 bar (367 kgf/cm²)
Travel Crossover Relief Valve Pressure : 368 bar (375 kgf/cm²)
Swing Crossover Relief Valve Pressure : 294 bar (300 kgf/cm²)

WEIGHT

Double grouse

Shoe width	Ground pressure	Machine Weight
STD. 650DG mm	1.37 kgf/cm²	97.0 ton
OPT. 750DG mm	1.19 kgf/cm²	97.6 ton
OPT. 750DG mm	1.20 kgf/cm²	98.3 ton
OPT. 900DG mm	1.01 kgf/cm²	99.5 ton

BUCKET (STD. 650DG mm)

Bucket Type	Capacity (m³)	Width (mm)	
	SAE/PCSA	W/O Cutter	With Cutter
S Class	5.4	1,940	1,940
	6.8	2,320	2,320

Based on ISO 10567 and SAE J296, arm length without quick change clamp

HYDRAULIC CYLINDERS

The piston rods and cylinder bodies are made of high-strength steel. A shock absorbing mechanism is fitted in all cylinders to ensure shock-free operation and extend piston life.

Cylinders	Quantity	Bore x Rod diameter x stroke
Boom	2	215 X 150 X 1,905 mm
Arm	1	240 X 170 X 2,020 mm
Bucket	1	210 X 145 X 1,530 mm

UNDERCARRIAGE

Chassis are of very robust construction, all welded structures are designed to limit stresses.High-quality material used for durability. Lateral chassis welded and rigidly attached to the undercarriage. Track rollers lubricated for life, idlers and sprockets fitted with floating seals. Tracks shoes made of induction-hardened alloy with triple grousers. Heat-treated connecting pins.Hydraulic track adjuster with shock-absorbing tension mechanism.

Upper rollers(Standard shoe) - 3
Lower rollers - 9
Track shoes - 51
Overall track length - 6,370 mm

SWING MECHANISM

High-torque, axial piston motor with planetary reduction gear bathed in oil. Swing circle is singlerow, shear type ball bearing with induction-hardened internal gear. Internal gear and pinion gear immersed in lubricant.

Max. Swing speed (Theoretical) - 6.3 rpm
Max. Swing speed (EFF. = 0.98 %) - 6.1 rpm
Max. Swing Torque (Theoretical) - 39,330 kgf.m (386 kN.m)
Max. Swing Torque (EFF. = 0.81 %) - 31,850 kgf.m (312 kN.m)

DRIVE

Each track is driven by an independent, high-torque, axial piston motor through planetary reduction gear. Two levers or foot pedal control provide smooth travel or counter-rotation upon demand.

Travel speed (High / low) - 4.5 / 2.6 km/h (EFF.=98%)
Maximum traction force - 60.6 / 36.9 ton (EFF.=77%)
Grade ability - 70%

REFILL CAPACITIES

Fuel tank - 1100 l
Cooling system - 99.8 l
Engine oil - 65 l
Swing drive - 2 x 8 l
Final drive - 2 x 25 l
Hydraulic tank - 880 l

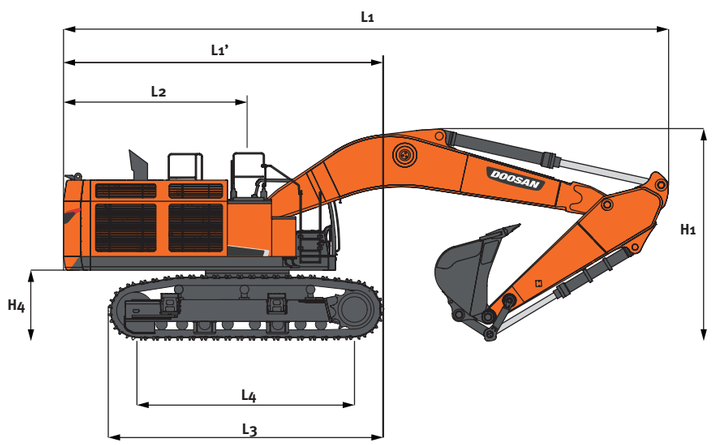
BUCKET DIGGING FORCES

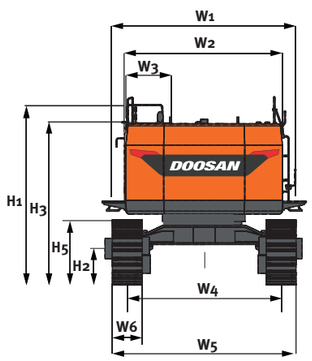
Bucket Type	Capacity (m³)	Width (mm)		Digging force (ton)
	SAE/PCSA	W/O Cutter	With Cutter	
S Class	5.4	1,940	1,940	STD/OPT
	6.8	2,320	2,320	[SAE] 40 / 44.8 [ISO] 42.96 / 48.2

ARM DIGGING FORCES

Arm	Length	Weight	Digging force (ton)
Standard	3,750 mm	3,563 kg	[SAE] 36.22, [ISO] 36.73
Short	2,900 mm	3,283 kg	[SAE] 40.3, [ISO] 40.8

DIMENSIONS



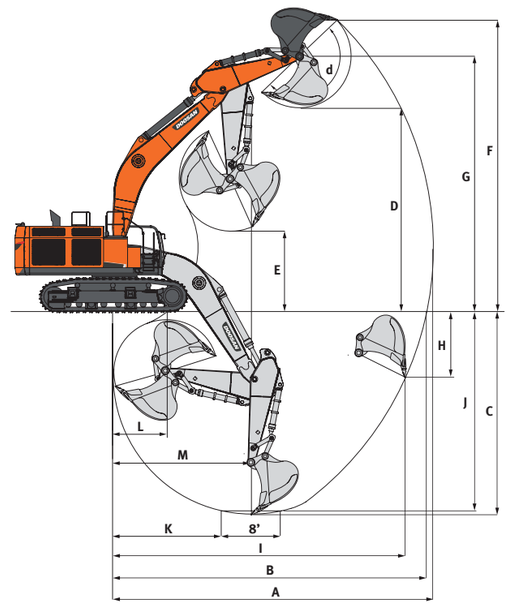


DIMENSIONS

BOOM TYPE (ONE PIECE)			**mm**	**7,250**	**8,400**
ARM TYPE			**mm**	**2,900**	**3,750**
BUCKET TYPE			**m^3**	**6.8**	**5.4**
Under Carriage (Grouser)				**650DG**	**650DG**
L1	Overall Length		mm	13,780	14,490
H1	Overall Height	Boom	mm	5,090	5,450
		Hose	mm	5,240	5,590
		Cabin	mm	3,610	3,610
		Hand/Guard Rail	mm	4,175	4,175
W1	Overall Width (Shipping)		mm	3,850	3,850
	Rear Swing Radius		mm	4,620	4,620
H2	Ground Clearance		mm	*860	*860
L2	Rear End Distance		mm	4,565	4,565
W2	House Width		mm	3,410	3,410
W3	Cabin Width		mm	1,010	1,010
H3	Height Over Cover [Bonnet]		mm	3,580 [3,790]	3,580 [3,790]
H4	Counterweight Clearance		mm	*1,560	*1,560
H5	Track Height		mm	*1,350	*1,350
L3	Track Length		mm	6,370	6,370
L4	Tumbler Distance		mm	5,100	5,100
W5	Undercarriage Width [w/o Step]		mm	4,610 [4,200]	4,610 [4,200]
W6	Shoe Width		mm	650	650
	Grouser Height		mm	52	52

* : without Grouser

WORKING RANGE



WORKING RANGE

BOOM TYPE (ONE PIECE)		**mm**	**8,400**	**7,250**
ARM TYPE		**mm**	**3,750**	**2,900**
BUCKET TYPE (SAE)		**m^3**	**5.4**	**6.8**
A	MAX. DIGGING REACH	mm	14,275	12,430
B	MAX. DIGGING REACH(GROUND)	mm	14,000	12,110
C	MAX. DIGGING DEPTH	mm	8,795	7,260
D	MAX. LOADING HEIGHT	mm	9,440	8,100
E	MIN. LOADING HEIGHT	mm	4,210	3,910
F	MAX. DIGGING HEIGHT	mm	13,840	12,425
G	MAX. BUCKET PIN HEIGHT	mm	11,862	10,515
H	MAX. VERTICAL WALL DEPTH	mm	4,470	2,965
I	MAX. RADIUS VERTICAL	mm	12,265	10,995
J	MAX. DEPTH TO 8' LINE	mm	8,665	7,110
K	MIN. RADIUS 8' LINE	mm	5,290	4,410
L	MIN. DIGGING REACH	mm	3,365	1,970
M	MIN. SWING RADIUS	mm	6,295	5,345
d	BUCKET ANGLE	deg	143.8	145.3